

Rapid Radar Plot Sheet

Rapid Radar Plot Sheet is a graphical program designed as a tool for plotting radar contacts on a computer screen replacing paper and pencil plots. It can be used as a plotting program with printed copy output or be used as a teaching tool. Students can be taught the techniques associated with using a radar to plot targets and determining target information based on their plot. As a tool, the program plots points to be entered graphically with the mouse, or numerically using range and bearing keypad entries. From these plots, the program displays the relative motion of targets and determines information about the system of plotted points. For example, the program can display target course, target speed, distance between targets, and distance between target and ownship. This can be useful in determining the effects of trial maneuvers and predicting the consequences of ownship maneuvers set to occur at a future time.



Fig. 1 - Rapid Radar Plot Sheet - Example Plot



Rapid Radar

Plot Sheet Program

General Description:

The Rapid Radar Plot Sheet Program provides a graphical system that allows the user to plot radar contacts on a computer screen as opposed to pencil and paper. System drawings consist of representations of the components that make up a typical radar plot. This includes changeable VRM and EBL measurement lines, range and bearing markings, and relative vectors that are drawn with respect to the speed and course of the Ownship. Other graphical tools provided to help in analyzing plots include:

- Ownship speed/course vectors
- CPA
- "e," "r," and "m" points,
- "r/m," "e/m," and "e/r" vectors
- "mx" point, r' point, and new RML vector

The Rapid Radar Plot Sheet Program allows the user to enter up to 6 moving targets per plot sheet and up to 5 plot points for each target. These plot points are entered according to time increments. The range scale of the plot and/or window size can be changed at any time and multiple plots may be displayed on the screen simultaneously. The user may also plot trial Ownship maneuvers on these various plot sheets. The effects of these trial maneuvers can be examined graphically on the plot sheets and can be used to help predict future conditions of the system.

In order to help analyze the system of targets, the Rapid Radar Plot Sheet Program supplies the user with a Target Window that displays all of the plot point information entered for targets. This also includes CPA information for the Ownship relative to each target. Changing Ownship maneuvers automatically updates the window giving the user instant feedback regarding changes in the system. Additionally, the user can receive target information by opening up Demand Windows that contain vector information about a particular target. The information provided by these windows can then be analyzed by the user to predict future states of the system.

Recommended System Requirements:

- P3 750MHz (min)
- Microsoft Windows OS
- 256 MB of RAM
- VGA (1024 x 768) or higher resolution monitor.
- Microsoft mouse or compatible.
- Printer, color and monochrome printing both supported. (Windows compatible)

Available Options:

- Radar plots can be printed in either color or monochrome.
- Designed to analyze DRM, SRM, BCR, BCT, DCPA, and TCPA for targets and Ownships.
- Support services are available for preparation of plots, exercises, problems, lessons, and instructor training. Contact BCG with specific requirements.

Corporate Information:

Buffalo Computer Graphics, formed in 1982, is a leading supplier of networked training systems and has extensive experience in developing, integrating, and maintaining computing systems. BCG has supplied PC-based simulation systems to customers all over the world including Fortune 500 companies, Maritime Academies, the U.S. Army, U.S. Coast Guard, and U.S. Navy.

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